

METHOD AND SYSTEM FOR ADAPTIVELY OBTAINING BANDWIDTH ALLOCATION REQUESTS

Abstract of the Disclosure

A method and apparatus for adaptively obtaining bandwidth requests in a broadband wireless communication system. The method and apparatus includes dynamically varying technique combinations enabling a plurality of users to efficiently request bandwidth from a shared base station. A user may "piggyback" a new bandwidth request upon, or set a "poll-me bit" within, presently allocated bandwidth. A base station may poll users, individually or in groups, by allocating unrequested bandwidth for new requests. Polling may respond to a "poll-me bit," and/or it may be adaptively periodic at a rate based on communication status parameters, such as recent communication activity and connection QoS levels. Group polling permits a possibility of collisions. Polling policies may be established for dynamically varying user groups, or may be determined for each user. Dynamic selection of appropriate polling techniques makes use of efficiency benefits associated with each technique.